

ORIGINAL

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

FIELD NOTES
OF THE
DEPENDENT RESURVEY OF A PORTION OF
THE EAST BOUNDARY
AND
THE METES-AND-BOUNDS SURVEY OF
THE ADMINISTRATIVE BOUNDARY BETWEEN
MARINE CORPS AIR STATION, YUMA
AND LUKE AIR FORCE BASE,
TOWNSHIP 9 SOUTH, RANGE 14 WEST,
OF THE GILA AND SALT RIVER MERIDIAN,
IN THE STATE OF ARIZONA.

EXECUTED BY

Daniel L. Maxey, Cadastral Surveyor

Under Special Instructions dated November 2, 2006, approved November 2, 2006, which provided for the surveys included under Group No. 1003, and assignment instructions dated November 2, 2006.

Survey commenced November 15, 2006

Survey completed November 16 , 2006

INDEX DIAGRAM

TOWNSHIP 9 SOUTH RANGE 14 WEST
GILA AND SALT RIVER MERIDIAN, ARIZONA

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13 ⁴
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Metes-and-Bounds Survey of the Administrative Boundary between MCASY and LAFB. Pages 5-7

T. 9 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the east boundary and the metes-and-bounds survey of the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 9 South, Range 14 West, Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows:

Lewis Wolfley surveyed the north boundary, the 2nd Standard Parallel South (south boundary) and portions of the east and west boundaries in 1893. Francis E. Joy resurveyed the west boundary and a portion of the north boundary and surveyed a portion of the west boundary in 1930. Roger F. Wilson resurveyed a portion of the east boundary in 1936 and resurveyed a portion of the north boundary, 2nd Standard Parallel South (south boundary) and a portion of the west boundary and surveyed the subdivisional lines in 1937.

The survey was executed in accordance with the specifications as set forth in the Manual of Instructions for the Survey of the Public Lands of the United States, 1973, and the Special Instructions dated November 2, 2006, for Group No. 1003, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation 5800 model receivers.

Preliminary to the resurvey, the lines of the prior surveys were retraced and search was made for all corners and other calls of record. Identified corners were remonumented in their original positions. Lost corners were reestablished and remonumented at proportionate positions based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

Geodetic control was derived from Global Positioning System (GPS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) AZBK MCDOT BUCKEYE CORS ARP, AZMO MARICOPA CORS ARP and SRP1 SALT RIVER PROJEC CORS ARP. The NAD 83 (CORS96)(EPOCH:2002), geographic position of the 1/4 section corner of sections 13 and 18, Townships 9 South, Ranges 13 and 14 West, is as follows:

Latitude: 32°38'47.45" N. Longitude: 113°39'38.93" W.

The mean magnetic declination is 11 3/4° E.

**Dependent resurvey of a portion of the East Boundary,
T. 9 S., R. 14 W., Gila and Salt River Meridian, Arizona**

CHAINS	
	<p style="text-align: center;">Restoring the resurvey executed by Roger F. Wilson, in 1936</p> <hr style="width: 20%; margin: auto;"/> <p>Beginning at the 1/4 sec. cor. of secs. 13 and 18, Tps. 9 S., Rs. 13 and 14 W., monumented with a severely rusted iron post, 1 in. diam., firmly set, projecting 7 ins. above ground, with brass cap mkd. 1/4 S13 S18 1936.</p> <p>At the corner point</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center; margin: 10px 0;"> <p>T 9 S R 14 W R 13 W 1/4 S 13 S 18 2006</p> </div> <p>Deposit a magnet, in a white plastic case, at the base of the stainless steel post.</p> <p>Bury the remains of the concrete core iron post inside of the stainless steel post and the brass cap with a portion of the concrete core iron post, 7 ins. long, alongside of the stainless steel post.</p> <p>North, bet. secs. 13 and 18, on the E. bdy. of the Tp.</p> <p>5.59 Point for Mile Post 6 + 45.08, at intersection with the Marine Corps Air Station, Yuma, administrative boundary of the Barry M. Goldwater Range, hereinafter described.</p> <p>39.97 The cor. of secs. 12 and 13 only, on the E. bdy. of the Tp., monumented with an iron post, 2 ins. diam., firmly set, projecting 18 ins. above ground, in a supporting mound of stone, 4 ft. base, to top, with brass cap incorrectly mkd. T9S R14W R14W S12 S18 S13 1936.</p> <p>Add the marks 2006 to the brass cap and correct the R14W to the E. to read R13W.</p> <hr style="width: 60%; margin: 10px auto;"/>

**Metes-and-Bounds Survey of the Administrative Boundary between
Marine Corps Air Station, Yuma and Luke Air Force Base,
T. 9 S., R. 14 W., Gila and Salt River Meridian, Arizona**

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Note. _____ The administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base on the Barry M. Goldwater Range is described as being along the eastern line of the Federal Aviation Administration (FAA), Special Use Airspace area, designated as R-2301W Ajo West, AZ. This line is controlled by a point determined at the intersection of the United States-Mexico Border and longitude 113°30'33" W. (NAD 83) and a point inaccurately described as being along the Southern Pacific Railroad and U.S. Highway at latitude 32°44'15" N., longitude 113°41'08" W. (NAD 83). The geographical position of the latter point actually falls 15.85 chains south of the southerly right-of-way of the existing Southern Pacific Company Railroad.

Therefore the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base on the Barry M. Goldwater Range is determined by extending a line from the point on the United States-Mexico Border thru a point determined at latitude 32°44'15" N., longitude 113°41'08" W. (NAD 83) to the intersection of the southerly right-of-way of the existing Southern Pacific Company Railroad.

From MP 4 + 3.75, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, at intersection with the N. bdy. of the Tp., monumented with an alum. post, firmly set, projecting 6 ins. above ground, with alum. cap mkd. T8S R14W MP4+3.75 S36 S1 T9S 2006.

A steel fence post with an attached, Bureau of Land Management, standard sign, S-201, is W. of cor.

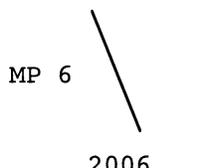
From this cor. point, the 1/4 sec. cor. of secs. 1 and 36, on the N. bdy. of the Tp., bears N. 89°54' E., 6.08 chs. dist., monumented with an iron post, 1 in. diam., firmly set, projecting 16 ins. above ground, in a supporting mound of stone, 3 ft. base, to top, with brass cap mkd. T8S R14W 1/4 S36 S1 T9S 2006 1936, with a cedar post, 4 x 2 ins., 3 ft. high, set alongside.

From this same cor. point, the cor. of secs. 1, 2, 35 and 36, on the N. bdy. of the Tp., bears S. 89°54' W., 34.03 chs. dist., monumented with an iron post, 2 ins. diam., firmly set, projecting 8 ins. above ground, with brass cap mkd. T8S R14W S35 S36 S2 S1 T9S 2006 1936.

From this same cor. point, the point determined at latitude 32°44'15" N., longitude 113°41'08" W. (NAD 83), bears N. 13°05' W., 307.90 chs. dist., not monumented.

S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.

**Metes-and-Bounds Survey of the Administrative Boundary between
Marine Corps Air Station, Yuma and Luke Air Force Base,
T. 9 S., R. 14 W., Gila and Salt River Meridian, Arizona**

CHAINS	
76.25	<p>Point for MP 5, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.</p> <p>Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with alum. cap mkd.</p> <div style="text-align: center;"> <p>T 9 S R 14 W</p>  </div> <p>Deposit a magnet, in a white plastic case, at the base of the alum. post.</p> <p>Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.</p> <hr/> <p>S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.</p>
80.00	<p>Point for MP 6, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.</p> <p>Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.</p> <div style="text-align: center;"> <p>T 9 S R 14 W</p>  </div> <p>Deposit a magnet, in a white plastic case, at the base of the alum. post.</p> <p>Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.</p> <p>Cor. falls on top of W. bank of wash, 50 ft. wide, 10 ft. deep, drains N. 45° E.</p> <hr/> <p>S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.</p>

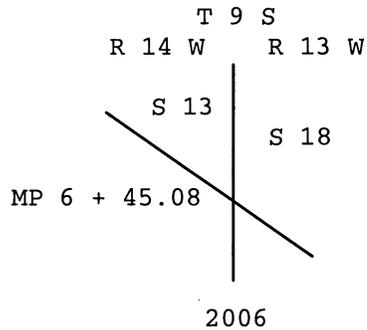
**Metes-and-Bounds Survey of the Administrative Boundary between
Marine Corps Air Station, Yuma and Luke Air Force Base,
T. 9 S., R. 14 W., Gila and Salt River Meridian, Arizona**

CHAINS

45.08

Point for MP 6 + 45.08, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, at intersection with the E. bdy. of the Tp.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.

From this cor. point, the 1/4 sec. cor. of secs. 13 and 18, Tps. 9 S., Rs. 13 and 14 W., bears South, 5.59 chs. dist., hereinbefore described.

From this same cor. point, the point determined at the intersection of the United States-Mexico Border and longitude 113°30'33" W. (NAD 83), bears S. 13°05' E., 3132.42 chs. dist.

From this intersection point, International Boundary Monument No. 180, bears S. 69°46' E., 361.28 chs. dist., monumented with an iron obelisk, 6 1/2 ft. high, 1 ft. square base, bolted onto a concrete pad, 3 ft. square, mkd. 180.

From this same intersection point, International Boundary Monument No. 181, bears N. 69°46' W., 21.98 chs. dist., monumented with an iron obelisk, 6 1/2 ft. high, 1 ft. square base, bolted onto a concrete pad, 3 ft. square, mkd. 181.

T. 9 S., R. 14 W., Gila and Salt River Meridian, Arizona

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GENERAL DESCRIPTION

The purpose of this survey is to identify the boundary of the Barry M. Goldwater Range, managed by the United States Marine Corps Air Station, Yuma. The general area is located south of Interstate 8 and the Southern Pacific Company Railroad, near the Mohawk Pass. Access south of the Interstate and Railroad is limited to access from an uncontrolled railroad crossing approximately 1 1/2 miles east of the east boundary of the Township.

Elevations for the area range between 350 ft. above sea level in the north portion of the township to the prominent Mohawk Mountains rising to approximately 2300 ft. in the southwest of the township. The terrain consists of gently rolling soft sand with scant vegetation, broken with many deep rocky washes, draining to the northeast from the base of the Mohawk Mountain range. Vegetation is primarily creosote, paloverde and other plants typical of the lower Sonoran Desert. The area is the habitat of the endangered flat tailed horned lizard, none of which were observed in the course of this survey.

The mean magnetic declination of 11 3/4° E. was derived from the National Geophysical Data Center's magnetic declination calculator, GEOMAG v6.0, utilizing the International Geomagnetic Reference Field model for years 2005 through 2010, for the dates of survey.

CERTIFICATE OF SURVEY

I, Daniel L. Maxey, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 2nd day of November, 2006, I have dependently resurveyed a portion of the east boundary and performed the metes-and-bounds survey of the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 9 South, Range 14 West, Gila and Salt River Meridian, Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction. Said survey has been made in strict conformity with said special instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

9-4-07
(Date)

Daniel L. Maxey
(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT
Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the east boundary and the metes-and-bounds survey of the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 9 South, Range 14 West, Gila and Salt River Meridian, Arizona., executed by Daniel L. Maxey, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

9/13/07
(Date)

Stephen K. Hansen
(Chief Cadastral Surveyor of Arizona)

~~CERTIFICATE OF TRANSCRIPT~~

~~I CERTIFY That the foregoing transcript of the field notes of the above described surveys in T. 9 S., R. 14 W., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

~~_____
(Date)~~

~~_____
(Chief Cadastral Surveyor of Arizona)~~